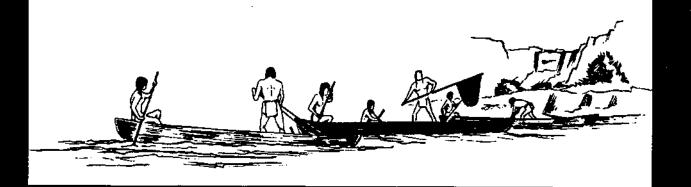
# LEMHI SHOSHONE – BANNOCK RELIANCE ON ANADROMOUS AND OTHER FISH RESOURCES





by Deward E. Walker, Jr. The Bureau of Land Management is cooperating with Indian tribes, state and local governments, and other federal agencies in ongoing efforts to improve the management of total ecosystems. For these efforts the BLM includes the human element and adds a time depth perspective to the ecosystem interrelationships. It is very rewarding to be involved in this effort to present information on the current evidence of ethnohistoric and ethnographic use of anadromous and other fish resources. These resources have played a large role in the development of the State of Idaho and provide an important tie to the cultural heritage of the Native Americans. We trust that this work will aid in your understanding and enjoyment of the ecosystems in Idaho.

Dr. Deward E. Walker, Jr. is a professor of anthropology at the University of Colorado and is frequently called upon to conduct ethnographic and ethnohistoric research for the Native American Tribal Governments in the Pacific Northwest. He is also employed as a faculty fellow with the Idaho State Office of the Bureau of Land Management where he provides technical assistance necessary for our ecosystem management.

The report "Lemhi Shoshone-Bannock Reliance on Anadromous and Other Fish Resources" by Dr. Deward E. Walker, Jr. has been published in Northwest Anthropological Research Notes; Vol. 27, No. 2. The Northwest Anthropological Research Notes are published at the Alfred W. Bowers Laboratory of Anthropology at the University of Idaho, Moscow, Idaho and the editor Dr. Roderick Sprague has provided permission for BLM to distribute this report as an Idaho BLM Technical Bulletin in order to reach a broader audience of resource specialists and managers.

Daniel J. Hutchison Archaeologist, Idaho State Office April 21, 1994

#### LEMHI SHOSHONE-BANNOCK RELIANCE ON ANADROMOUS AND OTHER FISH RESOURCES<sup>1</sup>

DEWARD E. WALKER, JR. University of Colorado

#### Abstract

An ethnohistoric and ethnographic reconstruction of Lemhi Shoshone-Bannock fishing is undertaken in order to investigate Plateau-Great Basin cultural linkages. Lemhi Shoshone-Bannock fishing technology and fishing locations are described and revised estimates of their substantial, annual fish catch are provided. To estimate tribal fish catches, a more empirical, comparative, historical, and comprehensive methodology than has been used in previous studies is proposed. It is concluded that cultural adaption to riparian corridors unifies Plateau-Great Basin cultures of the Columbia River drainage and that a fuller consideration of the significance of fishing is needed for all Shoshone-Bannock subgroups.

#### Introduction<sup>2</sup>

Earl Swanson (1970:65-125), at the 1970 symposium he organized, stimulated this examination of Lemhi Shoshone-Bannock fishing,3 when he noted the lack of interest among ethnographers in Plateau-Great Basin linkages. In this symposium consisting of papers and discussion, the principal questions raised -- but not answered -- dealt with linkages between the Plateau and Great Basin. Archaeologists have generally employed speculative ethnographic models in their interpretations of the prehistory of this region, but it is generally agreed that such crude models have rarely been verified by ethnographic research. Since 1960, I have undertaken comparative ethnographic research on a number of reservations (Fig. 1) dealing with the general topic of 1) Plateau-Great Basin, 2) Plateau-Plains, and 3) northern Great Basin-Plains interrelationships. A principal part of this research has concentrated on the Lemhi Shoshone-Bannock and their fishing practices. It has considered certain questions raised in the 1970 symposium chaired by Swanson. Previous ethnographic research has emphasized east/west linkages between the Plateau and Plains and between the northern Great Basin and Plains, ignoring the very significant north/south linkages noted by Swanson and others. Archaeologists have attempted more speculative reconstructions of prehistoric tribal fishing (Pavesic 1978, 1986; Schalk 1986); while I am confident that the following observations apply to the historic and protohistoric periods, others must decide how far back they may be validly extended into the prehistoric period. This research has also focused on 1) the idea of exclusive use of fish resources, 2) a review of prior estimates of Lemhi and other Shoshone-Bannock reliance on fish resources, 3) selection of an appropriate methodology for making such estimates, 4) deriving estimates for the Lemhi Shoshone-Bannock as a whole, and 5) deriving comparative estimates for various other fisheries.

## Historical Background of Exclusive Use

Of great importance to those interested in Great Basin-Plateau interrelationships are the extensive overlapping and interpenetration of tribal subsistence territories in the

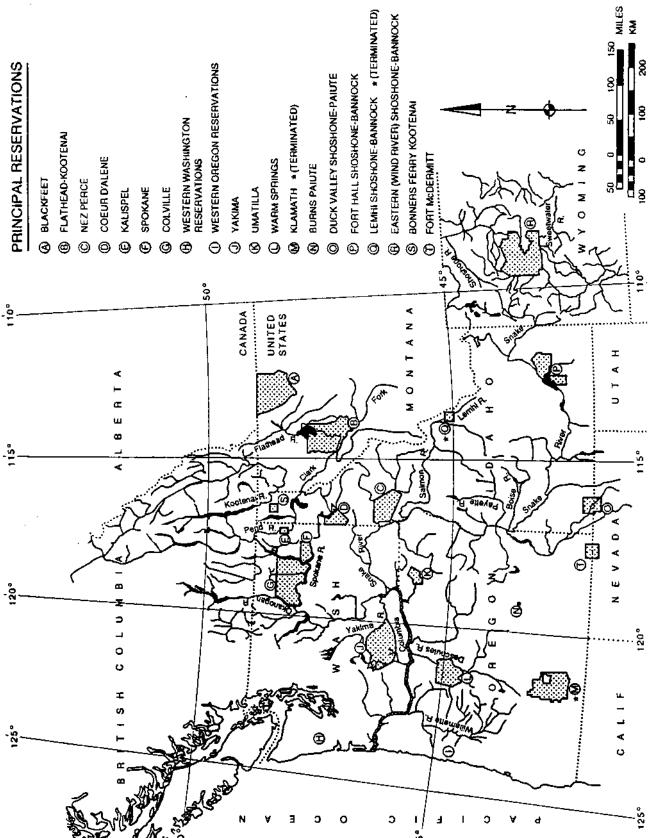


Fig. 1. Reservations of the interior Pacific Northwest.

Salmon River country and elsewhere along the Ute-Azetecan/Sahaptian frontier. Over the last century and a half, the negotiation of treaties, competing tribal claims before the Indian Claims Commission, and continuing litigation based on these proceedings have created among certain tribes and anthropologists notions of exclusive territorial domains for each tribal group. Reliable ethnographic research has been both explicit and consistent in denying the existence of exclusive rights to fish resources during the traditional (pretreaty) period (Walker 1967). Evidence for this conclusion is also widespread in the ethnohistorical literature. For example, Gibbs (1877:186) noted for the Puget Sound groups in the last century that:

As regards the fisheries, they are held in common, and no tribe pretends to claim from another, or from individuals, seigniorage for the right of taking. In fact, such a claim would be inconvenient to all parties, as the Indians move about, on the sound particularly, from one to another locality, according to the season.

This firsthand observation by Gibbs gains additional meaning when considered in light of the well-known ethnographic fact that both Great Basin and Plateau peoples were not only more mobile but also less property-minded than Northwest Coast tribes.

During the late nineteenth and early twentieth centuries pressure on fish resources brought on by commercial exploitation resulted in several attempts by non-Indians to preempt control of important fisheries on the Columbia River. Further, the subtle transformation of the Columbia River Indian fisherman from a traditional subsistence fisherman into a commercial fisherman controlled by fish corporations had much to do with the growth of ideas of exclusive ownership among Indian fishermen on the Columbia River. Hewes (1947:197) has outlined this widespread transformation for the Northwest as a whole. The concept of exclusive ownership led certain tribes (e.g., the Yakima) to claim exclusive ownership and control of the entirety of the fisheries in The Dalles-Celilo area that border their present reservation. This contradicts the well-known, intertribal, joint use of these fisheries by most tribes of the Plateau. Several Wishram and Wayam informants have recounted the numerous fights between fishermen of different tribes occurring at Celilo in the early 1900s. Whereas these fishing sites had been open during the traditional period, by the turn of the century they were becoming closely guarded property. Those who had once been welcome were sometimes forcibly ejected (Walker 1992).

It is not my intention here to evaluate the strength of exclusive tribal claims to Columbia River fisheries. It is appropriate, however, to note that the twentieth-century patterns of exclusive ownership and commercial fish exploitation typical of the Columbia River tribes is quite different from Lemhi Shoshone-Bannock fishing during this century. No commercial fishery developed on the middle or upper Snake River or on the Salmon River. Therefore, traditional fishing practices continued among the Lemhi and other Shoshone-Bannock subgroups with much less commercial alteration than was evident among the tribes of the Columbia River; commercial alteration affected Columbia River fishing gear, intertribal uses of fishing sites, and especially attitudes of ownership and sharing.

## Estimating the Tribal Fish Catch

To date most historical Columbia River-tribal estimates have relied on the crude methods of Hewes (1947, 1973), Rostlund (1952), and Walker (1967). Several steps must be taken if our estimates are to become more reliable. Currently I am attempting to

develop an improved methodology for making more precise estimates for four groups: the Nez Perce, the Spokane, the Kootenai, and the Lemhi Shoshone-Bannock. The methodology relies on the following steps and information.

- 1. Use of direct, recorded counts of fish catches.
- 2. Use of direct, recorded counts of the customary number of peak fishing days.
- 3. Use of direct, recorded counts of numbers of fishermen for the customary number of days and their productivity.
- 4. Use of direct, recorded counts of various types of fishing devices, with estimates of their efficiency.
- 5. Use of direct, recorded counts of the number of fishing locations customarily used, with estimates of their relative productivity.

Once such direct counts are obtained, it is then necessary to interpret them in light of the following limiting factors:

- 6. Nature and efficiency of traditional fishing gear.
- 7. Size and duration of the accessible fish run.
- 8. Extent and productivity of spawning habitats.
- 9. Cultural preferences for fish versus other foods, including the relative contribution of fish to the total tribal diet.
- 10. Climatic and other natural factors affecting annual variations in the size and availability of the catch, such as prolonged high water or drought.
- 11. Uses of fish for other than dietary purposes (e.g., in trade and commerce).
- 12. Comparison of all such recorded observations against ethnographic information, archaeological data, and oral history.

## Lemhi Shoshone-Bannock Fishing Practices

## Techniques

A first step in estimating the Lemhi Shoshone-Bannock fish catch is a description of their fishing technology. The fishing techniques employed by the traditional Lemhi Shoshone-Bannock closely resemble those found among tribes of the Columbia River and its tributaries. Certain of the techniques are identical. I have prepared a series of illustrations (Figs. 2-14) taken from archival photographs, direct observation in the field, ethnographic publications (Walker 1967), archaeological publications, and the memories of knowledgeable tribal informants who still employ some of these techniques; they include:

1. Various types of nets made of wild hemp, including dipnets and various seines as also seen in the Plateau (Figs. 2-4).

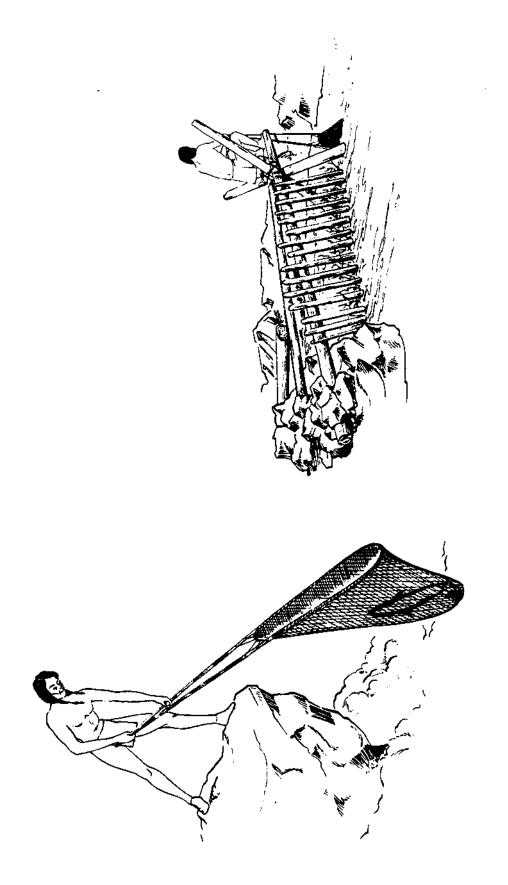


Fig. 2. Dipnetting from natural and artificial platforms employed by Lemhi Shoshone-Bannock and Plateau groups.

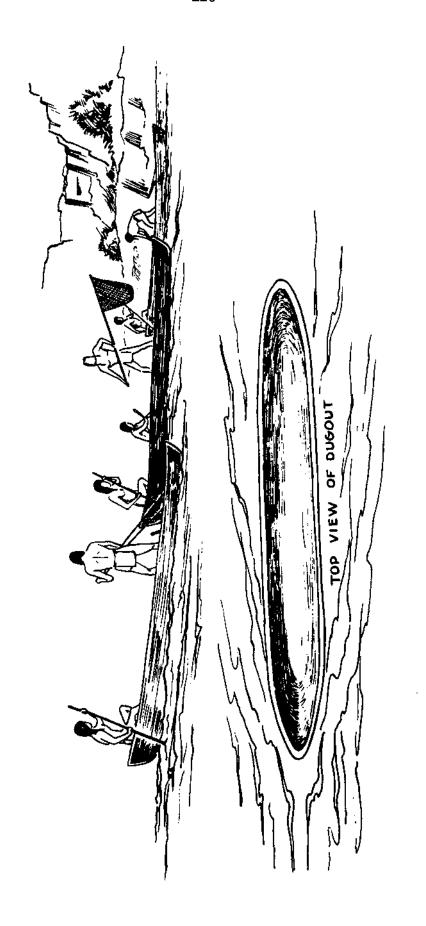


Fig. 3. Dipnetting from canoes employed by Lemhi Shoshone-Bannock and Plateau groups.

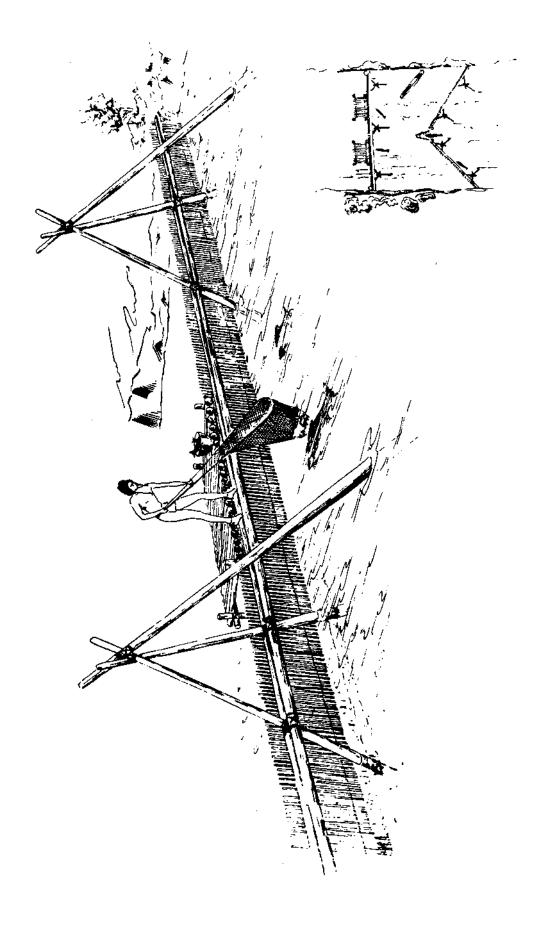


Fig. 4. Dipnetting associated with a compound weir employed by Lemhi Shoshone-Bannock and Plateau groups.

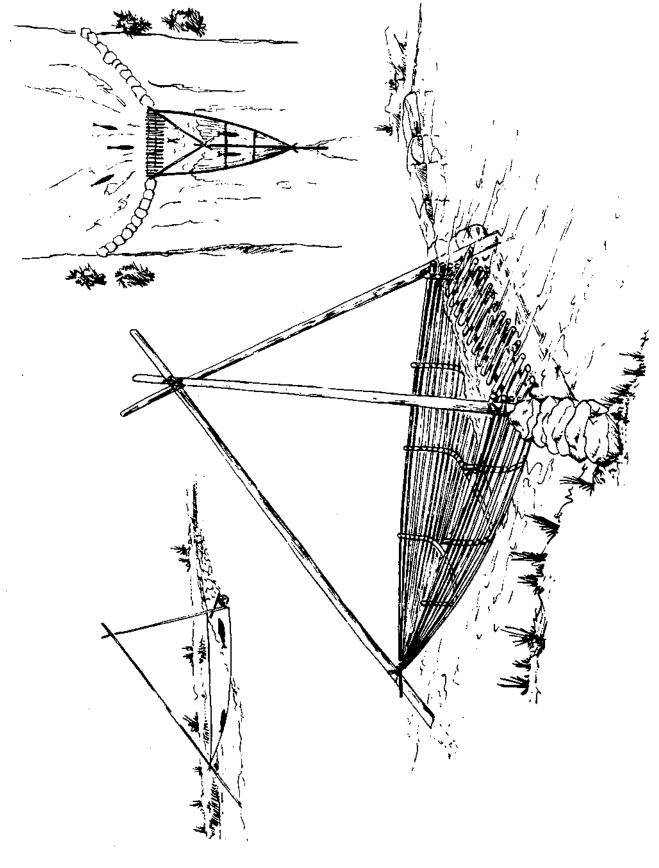


Fig. 5. Fall trap designed to catch fish moving downstream employed by Lemhi Shoshone-Bannock and Plateau groups.

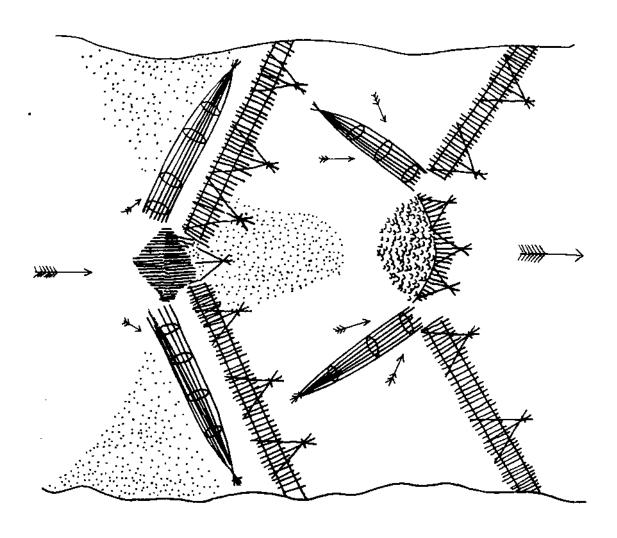


Fig. 6. Redrawing of compound fish weir described by Lewis and Clark in 1805 on the Lemhi River.

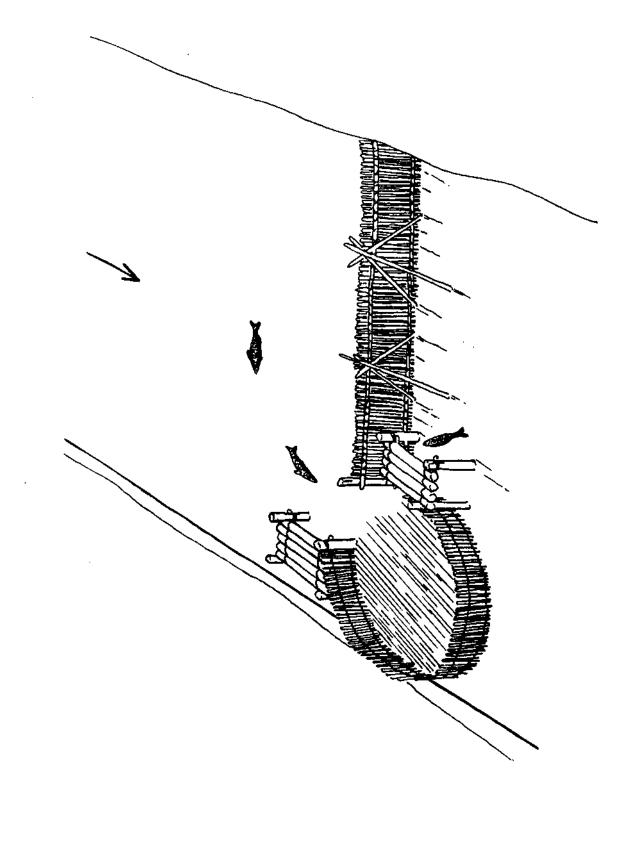


Fig. 7. Fish weir with circular enclosure and dipping platform employed by Lemhi Shoshone-Bannock.

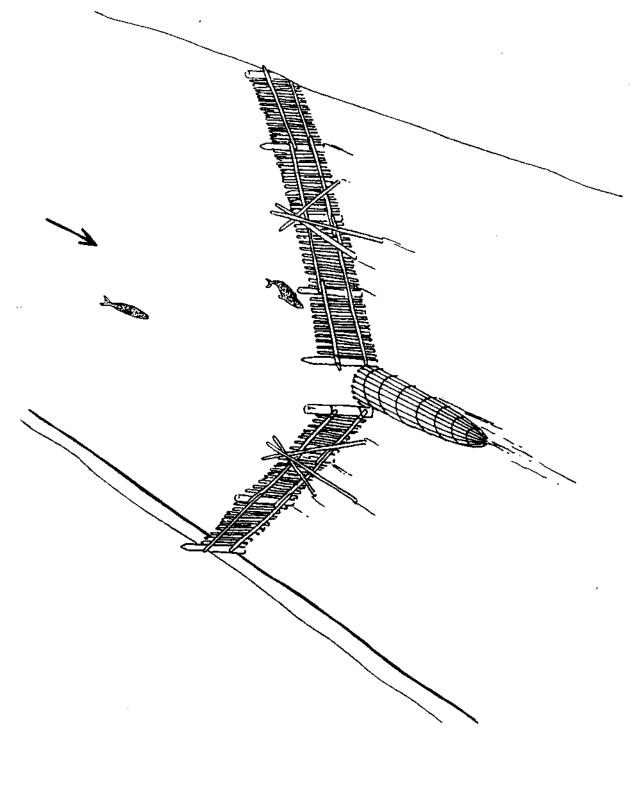


Fig. 8. Single fence, fish weir with conical basketry trap employed by Lemhi Shoshone-Bannock.

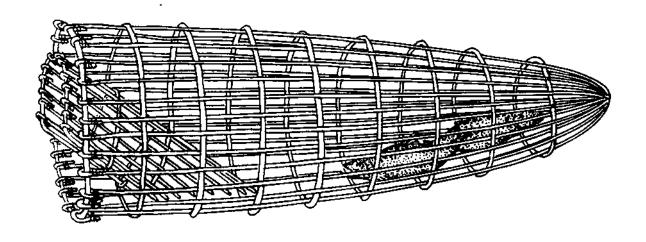


Fig. 9. Portable, conical, basketry trap with distinctive angular entryway (sometimes used with a weir) employed by Lemhi Shoshone-Bannock.

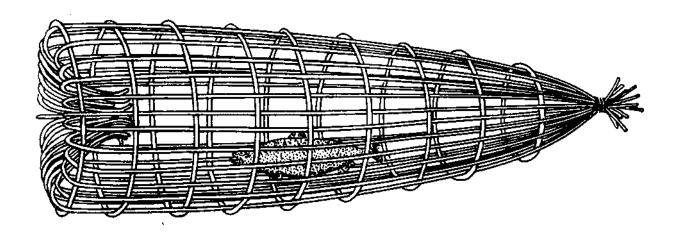


Fig. 10. Portable, conical basketry fish trap with conventional invaginated entryway (sometimes used with a weir) employed by Lemhi Shoshone-Bannock and Plateau groups.

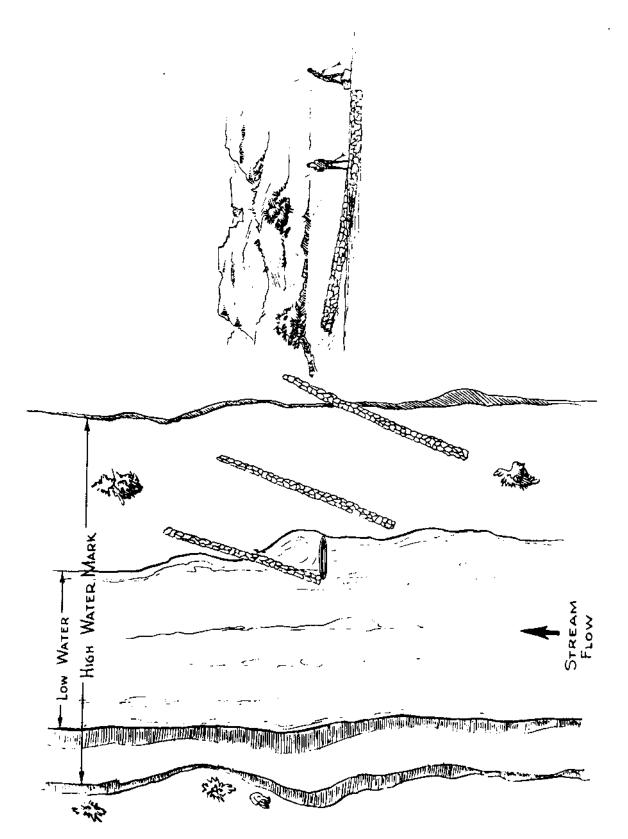


Fig. 11. Fish walls serving as dipping and spearing platforms employed by Lemhi Shoshone-Bannock and Plateau groups.

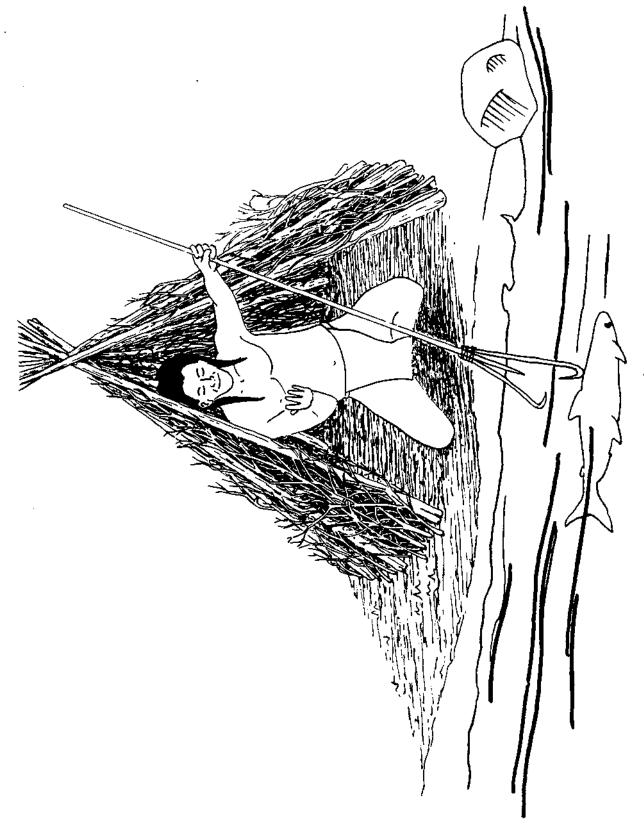


Fig. 12. Spear fishing blind employed by the Lemhi Shoshone-Bannock.

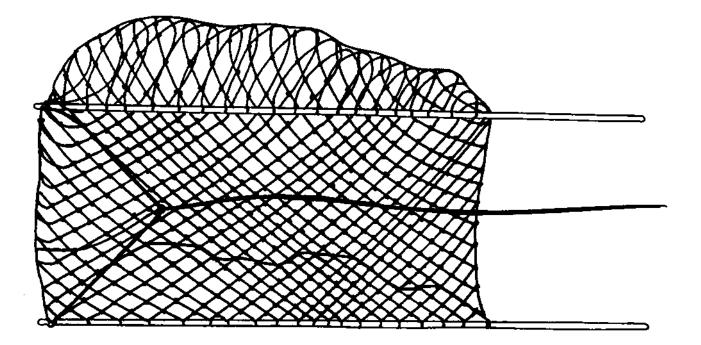


Fig. 13. Simple bag seine with string closure and detached handles employed by Lemhi Shoshone-Bannock.

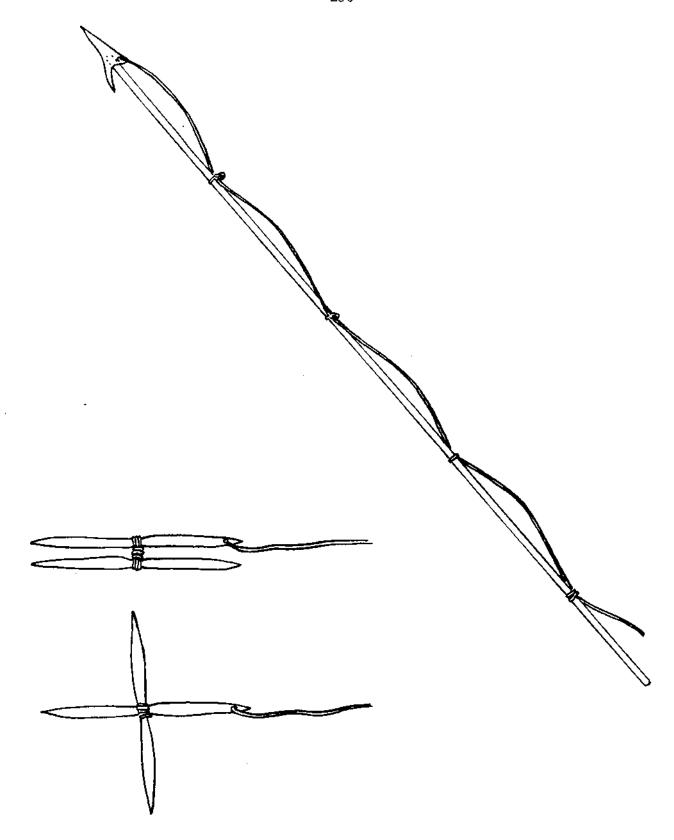


Fig. 14. Fish gorge and harpoon with detachable head employed by Lemhi Shoshone-Bannock and Plateau groups.

- 2. Detachable harpoons (Fig. 14), leisters, and double-pronged spears in a style somewhat different from the Plateau styles seen among the Nez Perce, Umatilla, Yakima, and others. They were made of bone, stone, and horn. The double-pronged spear has not been reported for the Plateau.
- 3. The spearing or hooking blind (Fig. 12) in which a fisherman waited in a concealing structure to spear or hook the fish. This has not been reported for the Plateau.
- 4. Weirs (fence-like structures; Figs. 3, 5-7) like those first seen by Lewis and Clark on the Lemhi River that were employed on mid-sized streams; also seen in the Plateau.
- 5. Traps such as the fall trap (Fig. 4) for taking fish descending the river and seen in the Plateau.
- 6. Basketry (tubular or conical) traps used independently or in conjunction with weirs (Figs. 5, 7-9); also seen in the Plateau.
- 7. Dams built of piled stone so as to permit spearing or harpooning, usually in smaller streams; also seen in the Plateau.
- 8. Gorges (Fig. 14) and hooks of bone and wood used to gaff as well as hook fish (with bait). They ranged in size from the large sturgeon hooks (with or without bait) to the small gorges used with bait. The large sturgeon hooks were used with long ropes that permitted butchering in the water, because the sturgeon were sometimes too large to land while still alive and intact. These have all been seen in the Plateau.
- 9. Fishwalls (Fig. 11) constructed of piled stones and extended out into the larger streams providing both a resting place for salmon moving upstream as well as a dipping and spearing platform for fishermen; also seen in the Plateau.
- 10. Various types of stupefacients that temporarily immobilized fish so they could be speared, hand-fished, or dipnetted; also seen in the Plateau.
- 11. Cooperative fish drives were employed in placid pools in conjunction with spears, harpoons, nets, and fish clubs. Much larger congregations of tribal members exceeding one thousand would fish cooperatively by various techniques under the direction of a fishing specialist/leader (sometimes referred to as a fish or salmon chief) in such fisheries as the Hagerman-Shoshone Falls, Weiser-Boise Valley, and Lemhi Shoshone-Bannock fisheries. *Idaho Yesterdays* (1974:14-23) presents a description of the Hagerman-Shoshone Falls fisheries. These large fisheries resemble Celilo and Kettle Falls in the Plateau.
- 12. Preservation of fish required little beyond sun drying, but smoke was also used for taste and to protect against insects. There was an extensive Lemhi Shoshone-Bannock trade in dried fish with tribes of the western Great Plains (Crow, Flathead, and Wind River Shoshone-Bannock), the Great Basin (Northern Paiute), and to a lesser extent, the Plateau (Nez Perce). Dried fish were readily stored in basketry containers and in several types of underground caches for use during seasons of limited availability. Fish pemmican was prepared and traded as were sturgeon oil